

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
Rural Call Completion)	WC Docket No. 13-39
)	

COMMENTS OF HD TANDEM

HD Tandem hereby submits these comments in response to the Second Report and Order and Third Further Notice of Proposed Rulemaking (FCC 18-45, released April 17, 2018) in the above-captioned rulemaking proceeding. HD Tandem has significant insight into the carrier practices that created the need for this proceeding. We believe that the agency is on the right course and are filing these comments to serve as a resource for the Commission as it considers the correct response to the NPRM. By defending abandoned notions of carrier-transparency and good faith dealing between intermediate and other carriers, HD Tandem strongly suggests that the agency act in the interests of entities, such as HD Tandem who are investing in next-generation platforms that will deliver new and better ways for consumers to communicate. Specifically, for the reasons set forth below, HD Tandem respectfully urges the Federal Communications Commission (“FCC” or “Commission”) to: (1) apply the proposed intermediate provider registration and use requirements broadly across all potential providers in a call path; (2) exercise oversight regarding reported completion and quality problems by requiring covered providers and intermediate providers to maintain, and furnish upon request to the Commission or state authorities as appropriate, the identities of any or all intermediate providers in their respective call paths; (3) dedicate Commission resources to addressing the identified problems; and (4) impose substantial penalties on non-compliant carriers and providers.

I. INTRODUCTION

HD Tandem is a nationwide intermediate provider with an emphasis on direct connectivity between originating carriers and terminating carriers. These services are provided utilizing next generation technologies and CODECs and contracted on a mutually-negotiated commercial agreement basis.

HD Tandem has firsthand experience with the intentional rural call completion and degradation issues that continue to plague the telecom industry. Many providers knowingly and recklessly hand off calls believing that if the call leaves their facilities ‘clean’ they have done their job and, should anything happen at a downstream intermediate carrier, it is no longer their problem. HD Tandem has spent significant resources trying to improve call completion rates to its carrier partners, both in working with originating carriers, with mixed success depending on the carrier, as well as developing network technologies to protect our network and partners from these intentional routing decisions.

As such, HD Tandem appreciates the FCC’s renewed focus on improving call completion rates and quality of service to rural America. We believe that the FCC is now on the correct path to improving call completion issues both in rural America and beyond. HD Tandem thanks the FCC for recognizing the need for covered provider’s requirement to include competitive local exchange carriers as well as the incumbents. HD Tandem also applauds the recent action by the FCC to fine a wireless carrier for inserting false rings and for clearly defining that the originating carrier is responsible for all the intermediate carriers in the call path on the way to completing the call. Holding carriers accountable for their call routing decisions is an important first step along the path to resolution. In addition, requiring all intermediate carriers to register with the FCC is of critical importance and will provide the FCC and the industry the tools needed to identify and root-out bad players. However, FCC oversight, swift enforcement, and appropriate penalties will be critical to ensure that the new requirements achieve their intended purpose.

II. THE MAJORITY OF THE PROBLEMS WITH CARRIERS BLOCKING OR DEGRADING TRAFFIC APPEAR TO BE INTENTIONAL AND IMPLEMENTATION OF NEW CALL COMPLETION RULES MUST TAKE THIS BEHAVIOR INTO ACCOUNT IF THEY ARE TO BE EFFECTIVE

Out of necessity, and over the course of several years, HD Tandem has increased its focus on protecting its network from fraudulent call routers. HD Tandem has become an expert at fraud detection in the rural competitive local exchange carrier space it serves by building a complete stack of fraud detection equipment and software that gathers data from the origination of the call to the termination of the call and quickly identifies ANI manipulation along with other quality degradation traits which are symptoms of a much larger issue – cost shifting. HD Tandem

has accumulated evidence that the call degradation and completion issues found in the rural competitive local exchange carriers that *it* serves are mostly caused by the intentional activity of carriers shifting costs to another carrier's network. Cost shifting has become increasingly sophisticated and widespread in the areas that HD Tandem serves. HD Tandem identifies millions of call attempts per month -- or up to 10% of all call attempts -- where cost-shifting techniques or re-origination schemes such as "SIMs by-pass" or "Hacked PBX" are used. These schemes cause false rings, ANI manipulation, dropped calls, no DTMF, dead air and several other quality-degrading problems. In addition, in the month of May, 62% of all trouble tickets received could be directly tracked to cost shifting activities that couldn't be stopped by our systems. As such, many more calling problems likely still continue to go unreported and undetected. While HD Tandem is proud of its work to defend its network from these practices, the FCC should understand these investments as those that could otherwise be put to more pro-consumer uses. Instead of preventing fraud, these resources could be used to innovate in a more consumer-centric, instead of carrier-centric manner.

HD Tandem is also aware of other activities that carriers are undertaking to reduce traffic on its network, by inserting messaging, or imposing false or unreasonably discriminatory pricing, that can have the effect of confusing or impeding the customer from completing its call. This too should be prohibited by the FCC and intermediate carriers should not be allowed to alter any part of the call flow.

Trying to solve the quality problems associated with cost-shifting is an extremely difficult task without being able to trace the entire call path to find where, and with what intermediate carrier, the problem is occurring. This is because if the call gets re-originated with manipulated call information, requiring both legs of the call to be identified and tracked, the involved carriers are typically unwilling to assist in troubleshooting. HD Tandem has sent numerous Cease and Desist letters to originating carriers and intermediate carriers both notifying them that the cost-shifting activity is happening on their network and demanding that the behavior stop. HD Tandem has instigated legal proceedings and reported the fraud to legal authorities. Those efforts fail because some originating carriers refuse to take corrective action and conceal the offending intermediate carriers under the guise of confidentiality.

III. IN LIGHT OF THE APPARENT INTENTIONAL NATURE OF CURRENT CALL COMPLETION AND QUALITY PROBLEMS, APPLYING THE PROPOSED REGISTRATION AND USE REQUIREMENTS BROADLY ACROSS ALL POTENTIAL PROVIDERS IN A CALL PATH IS A NECESSARY STEP TOWARD THE STATED REQUIREMENT OF ENSURING THE INTEGRITY OF THE TRANSMISSION OF VOICE COMMUNICATIONS TO ALL CUSTOMERS

HD Tandem views the requirement for all intermediate providers to register with the FCC as a critical step in providing accountability for anyone handling a voice call. The limitation, however, that it only be required of intermediate providers “that charge any rate to any other entity (including an affiliate) for the transmission” may be an exploitable loophole. Even if the intermediate provider does not charge a rate, for whatever reason, HD Tandem supports a registration requirement. HD Tandem strongly supports requiring any entity, affiliated or otherwise, to be registered and held accountable for its routing decisions if it is in the call flow and regardless of whether it charges for its services.

HD Tandem also strongly supports the proposal that covered providers and intermediate providers must be responsible for knowing the identity of all intermediate providers in a call path and that a covered provider and intermediate provider may not rely on *any* unregistered intermediate providers in the path of a given call as a condition of continued registration. HD Tandem agrees that since covered providers are accountable for exercising oversight regarding the performance of all intermediate providers (in the path of calls for which the covered provider makes the initial long-distance call path choice), they must be responsible for obtaining and retaining this information. Permitting covered providers to “pass the buck” by not knowing the identities of all their intermediates amounts to allowing covered providers to circumvent their duties by employing unknown or anonymous intermediate providers in a call path.

In addition to the proposed intermediate provider registration and use requirements, HD Tandem supports a requirement that the covered providers and intermediate providers’ registration information include a list of the registered intermediaries it is currently interconnected with. This will help the FCC quickly trace troublesome call issues downstream and provide insight into intermediate carrier routing chain. It will also allow the FCC to notify the appropriate carriers of identified intermediate provider routing issues, fines, and changes in registration status so carriers can take the appropriate actions.

The FCC should also consider requiring terminating LECs to maintain a listing of their direct interconnections. This would be helpful for covered carriers who seek verified, one “hop” access. (HD Tandem understands it is very common for intermediate carriers to represent that they have direct LEC connections when, in fact, they do not.) HD Tandem believes this additional information, along with the information stated in the NPRM, provides the additional call routing transparency the FCC desires.

Lastly, the proposed rules state that a covered carrier may only use a registered intermediate carrier, but this should also apply to intermediate carriers as well. Every provider that touches the call on the way to the termination endpoint should be a registered provider.

IV. WITHOUT THE ABILITY TO TRACE A CALL’S COMPLETE ‘LINEAGE’ WHEN A PROBLEM IS REPORTED, THE FCC’S EFFORTS ARE LIKELY TO LEAVE THE MOST TROUBLING CALL DEGRADATION PROBLEMS UNADDRESSED

HD Tandem appreciates and strongly supports the FCC’s proposal to require covered providers to maintain, and furnish upon request to the Commission or state authorities as appropriate, the identities of any or all intermediate providers in their respective call paths. The FCC is correct that making this information available upon request to the Commission and state authorities will facilitate the FCC’s and state authorities’ understanding of rural call completion issues and how to combat them. This approach will certainly help maximize the value of the registry for promoting rural call completion and ensure compliance with section 262(b).

In fact, a registration process *without* this oversight mechanism will likely be very ineffective. Tracking call blocking and degradation issues becomes increasingly complicated when there are multiple intermediate carriers in a call flow. In HD Tandem’s experience and investigation, most trouble tickets are resolved by “*made a routing change, please test again*” only to have the issues return in subsequent days or weeks. As such, we believe the FCC needs a clear way to track the ‘lineage’ of calls at issue to quickly identify where the routing went awry and to ensure that all intermediate carriers in the call flow are registered and meeting performance standards. This information will allow the FCC to quickly track call completion issues to intermediate providers at an aggregated level across all covered carriers and identify any troubling patterns of behavior.

To facilitate communication with carriers experiencing such call problems, and ultimately identifying and resolving such problems, the FCC should consider establishing a point of contact dedicated to this effort. HD Tandem believes such dedicated attention should only be warranted for a short period after implementation. The ability to fully trace troublesome calls will root out the problem at its source. Illegitimate actors will be quickly weeded out, and covered carriers will not further enable their business models.

V. ENFORCEMENT

Implementing the proposed rules will be a good start, but without swift, timely enforcement, it is HD Tandem's experience they will be largely disregarded. Consequently, the FCC needs to have severe penalties for non-compliance, which should include losing a registration or, in the case of fraudulent routing, referral to an appropriate agency to institute criminal proceedings. If an intermediate provider loses its license, it should no longer be allowed to operate. Covered carriers using that intermediate provider would need to remove it from routing.

VI. CONCLUSION

HD Tandem believes that by implementing sufficient accountability, transparency, and enforcement, most of the call completion and quality issues that plague the industry today can be remedied. The proposed rules, if fully implemented across all providers and combined with the FCC's oversight ability (informed by the identities of any or all intermediate providers in their respective call paths) and commitment, will finally reign in these pressing call completion and quality issues.

Respectfully submitted,

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